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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,866

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Pierre Vincent

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EXAMINER

ROBINSON, RYAN C

ART UNIT

PAPER NUMBER

2614

MAIL DATE

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12/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,866	Applicant(s) VINCENT, PIERRE	
	Examiner RYAN C. ROBINSON	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claim 15 has been amended on 8/6/2009.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 11-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thiele, U.S. Patent No. 5,400,414, published on 3/21/1995, (hereby Thiele).**

4. As to claim 11, Thiele teaches a system for the projection of cinematographic works or digital works with sound (Fig. 7A) with at least one sound channel, comprising a screen (27) and, for the at least one sound channel, at least one woofer (24) and at least one medium/treble speaker (The speaker is disclosed mid-range and as on the surface of the screen 27; Col 3, lines 59-60, Col. 4, lines 1-4), said system further comprising: the at least one medium/treble speaker comprising a flat sound transducer (The transducer is a foil; Col. 3, lines 59-60) placed against the screen to a rear thereof in relation to a direction of projection (Col. 4, lines 10-12); and an extreme treble speaker (26) being disposed on a periphery of the screen (27).

It is noted that while Thiele does not explicitly disclose whether or not there are perforations in the screen, the screen is not limited to being either perforated or non perforated. Furthermore, since the flat mid-range speaker are placed on the surface of the screen (Col. 3, lines 59-60) and the screen is disclosed as serving as a loudspeaker, one of ordinary skill would apprise that perforations are not required in the screen taught by Thiele. Examiner takes official notice that it is well known in the art to use a non-perforated screen when the screen is used as a sound radiating surface. Therefore, it would have been obvious to one of ordinary skill to use a screen having no perforations in the system taught by Thiele.

5. As to claim 12, Thiele teaches that the medium/treble transducer (behind element 27) is disposed substantially above the at least one woofer (24).

6. As to claim 13, Thiele does not explicitly disclose that the extreme treble speaker is disposed above the screen and substantially above the transducer. In Fig. 7A, the extreme treble speaker (26) is shown on the sides of the screen (27). Thiele does not limit the extreme treble speaker to an optimal location. Therefore, it would have been obvious to one of ordinary skill to place the extreme treble speakers above the screen and substantially above the transducer, since it has been held that rearranging parts of an invention involves only routine skill in the art.

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7. As to claim 14, Thiele teaches at least two lateral channels (there are left and right channels in housing parts 22 and 23), and a pair of extreme treble speakers (26) for the at least two lateral channels disposed on either side of the screen (27).

8. As to claim 15, Thiele teaches the extreme treble speakers (26) of the at least two lateral channels being disposed substantially at a height of a plurality of flat transducers of the corresponding channels. (Since the transducer extends over the entire surface of the screen 27, the extreme treble speakers 26 are at the same height as the flat transducers.)

9. As to claims 16 and 17, Thiele teaches two lateral channels (there are left and right channels in housing parts 22 and 23), and the extreme treble speakers for the lateral channels being disposed above the screen. It is noted, that Thiele does not explicitly disclose that the extreme treble speakers for the lateral channels are disposed above the screen and substantially above the transducer. In Fig. 7A, the extreme treble speakers (26) are shown on the sides of the screen (27). Thiele does not limit the extreme treble speaker to an optimal location. Therefore, it would have been obvious to one of ordinary skill to place the extreme treble speakers above the screen and substantially above the transducer, since it has been held that rearranging parts of an invention involves only routine skill in the art.

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10. As to claim 19-20, Thiele is silent as to the frequency ranges of the transducers, specifically the woofers around 300 Hz to 800 Hz and the extreme treble speaker being arranged to produce sounds with a frequency that is higher than around 3 kHz to 5kHz. It would have been obvious to one of ordinary skill in the art to adjust speaker parameters for a desired frequency range.

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thiele, U.S. Patent No. 5,400,414, published on 3/21/1995, (hereby Thiele), in view of Nishida, U.S. Patent No. 4,998,283, published on 3/5/1991 (hereby Nishida).

12. As to claim 18, with respect to claim 11, Thiele teaches two lateral channels, (there are left and right channels in housing parts 22 and 23). It is noted that Thiele does not disclose four-channel sound, as well as a central-high channel, and a central low channel, with extreme treble speakers for each channel disposed above and below the screen for the respective channels. However, providing additional channels for audio in cinematographic works is well known in the art and Nishida teaches four-channel sound with a central high channel, and a central low channel (Fig. 5), in which an extreme treble speaker of the central-high channel (17L) is disposed above the screen (14), and an extreme treble speaker of the central-low channel (17L) is disposed under the screen (14). Therefore, it would have been obvious to one of ordinary skill in the art to provide, in the system taught by Thiele, an extreme treble speaker of the central-high channel, and an extreme treble speaker of the central-low channel,

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disposed above and under the screen, respectively, for the added feature of extra audio channels.

Response to Arguments

13. Applicant's arguments filed on 8/6/2009 have been fully considered but they are not persuasive. Applicant submits that using a non perforated screen would not have been obvious when the screen is used as a radiating source, and asserts that a modification to Thiele would have not been obvious. It was in fact well known at the time of Applicant's invention that perforations are unnecessary, when the screen is used as a sound radiation surface. For example Liebacher, U.S. Patent No. 3,553,392, published on 1/5/1971, teaches that a projection screen that is used as a sound radiation surface, does not require perforations in the screen, as opposed to a screen used as a sound *transmission* surface, which would require perforations (Col. 3, lines 64-71).

Furthermore, the obviousness rejection would not require a modification of the Thiele reference, only a selection of a suitable material used for the projection screen, since Thiele did not limit the material of the screen.

Applicant also submits that since the patent was issued before the use of digital cinematographic works. Examiner respectfully disagrees. The Thiele reference is directed to a screen capable of displaying HDTV images (Thiele Col. 3, lines 51-60), which are well known as utilizing a digital format. Furthermore, assuming, arguendo, that somehow the screen is incapable of having anything produced digitally projected on it, and the speaker system is incapable of broadcasting audio which was recorded

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digitally, the limitation in the preamble of claim 11 is in the alternative, which recites “cinematographic works or digital works with sound”.

Applicant further submits that Thiele only teaches a mid range speaker and not a medium treble speaker, and asserts that a medium/treble speaker would have a specific range. It is noted that the features upon which applicant relies, which is a range of frequencies are not recited in claim 11. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further submits that Thiele does not teach that the flat transducer is placed against the screen to a rear thereof in relation to the direction of projection, and asserts that Thiele teaches that in a certain embodiment, the speaker is not affixed to the screen. Examiner respectfully disagrees. Thiele teaches that in every case, the speaker is affixed to the screen, since it extends over a surface of the screen. (Col. 3, lines 60-61; Col 4, line 1).

Finally, Applicant's arguments with regard to the rejection of claim 18 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

The prior art made of record

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|----|------------------|---------|
| a. | US Patent Number | 5400414 |
| b. | US Patent Number | 4998283 |

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/R. C. R./

Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614